

IN THE CLAIMS

Please cancel Claim 11, without prejudice or disclaimer of subject matter.

Please add Claims 15-28, to read as follows.

1-14. (Canceled)

15. (New) A printhead comprising an element substrate having a printing element, a digital circuit and an analog circuit,

    said digital circuit being for selectively driving said printing element in accordance with input print data, and

    said analog circuit including detection means for obtaining information, wherein a value of a voltage for driving said analog circuit is higher than a value of a voltage for driving said digital circuit, and a value of a voltage to be supplied to said printhead is higher than the value of the voltage for driving said analog circuit, and

    a voltage generation circuit for generating the voltage for driving said analog circuit by using a voltage applied to said printing element is arranged on said element substrate.

16. (New) The printhead according to claim 15, further comprising a capacitor arranged outside said element substrate and having one terminal connected to the voltage for driving said analog circuit and the other terminal grounded.

17. (New) The printhead according to claim 15, wherein said voltage generation circuit comprises a dividing resistor and a transistor.

18. (New) The printhead according to claim 15, wherein said voltage generation circuit comprises a noninverting amplifier.

19. (New) The printhead according to claim 15, wherein said digital circuit comprises a shift register for temporarily storing the print data and a latch for holding the data stored in said shift register.

20. (New) The printhead according to claim 15, wherein said analog circuit comprises means for detecting an external temperature of said element substrate or means for monitoring a heater resistance value.

21. (New) The printhead according to claim 15, wherein said printhead is an inkjet printhead which ejects ink to print.

22. (New) The printhead according to claim 21, wherein said printing element comprises an electrothermal transducer for generating thermal energy to be applied to the ink so as to eject the ink using the thermal energy.

23. (New) The printhead according to claim 22, wherein said detection means detects a temperature of said element substrate.

24. (New) The printhead according to claim 22, wherein said digital circuit comprises a memory for storing at least one of pieces of information related to a resistance value of said electrothermal transducer, a resistance value upon driving of said printing element, and a thickness of each layer of said element substrate.

25. (New) The printhead according to claim 15, wherein the value of the voltage for driving said digital circuit is 3.3 V, and the value of the voltage for driving said analog circuit is 5 V.

26. (New) A printing apparatus for printing using a printhead, wherein said printhead comprises an element substrate having a printing element, a digital circuit and an analog circuit, said digital circuit being for selectively driving said printing element in accordance with input print data, and said analog circuit including detection means for obtaining information,

a value of a voltage for driving said analog circuit is higher than a value of a voltage for driving said digital circuit, and a value of a voltage to be supplied to said printhead is higher than the value of the voltage for driving said analog circuit,

a voltage generation circuit for generating the voltage for driving said analog circuit by using a voltage applied to said printing element is arranged on said element substrate, and

a power source circuit for supplying to said printhead the voltage to be applied to said printing element and the voltage for driving said analog circuit.

27. (New) The printhead according to claim 15, wherein an output of said voltage generation circuit is connected to a capacitor.

28. (New) The printhead according to claim 15, wherein the voltage to be applied to said printing element and the voltage for driving said analog circuit are supplied to said printhead from outside of said printhead.